

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP02/08610

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> G03C1/73, G02F1/13, G02F1/1333, C09K9/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> C03C1/73, G02F1/1333

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Jitsuyo Shinan Toroku Koho	1996-2002
Kokai Jitsuyo Shinan Koho	1971-2002	Toroku Jitsuyo Shinan Koho	1994-2002

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 5644416 A (Fuji Xerox Co., Ltd.), 01 July, 1997 (01.07.97), Full text; all drawings & JP 5-216183 A	1-4, 6, 7 5, 8-13
X Y	JP 6-148608 A (Fuji Xerox Co., Ltd.), 27 May, 1994 (27.05.94), Full text; all drawings (Family: none)	1-4, 6, 7 5, 8-13
X Y	JP 7-161039 A (Canon Inc.), 23 June, 1995 (23.06.95), Full text; all drawings (Family: none)	1-4, 6, 7 5

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
19 November, 2002 (19.11.02)Date of mailing of the international search report  
03 December, 2002 (03.12.02)Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 7-36008 A (Fuji Xerox Co., Ltd.), 07 February, 1995 (07.02.95), Full text; all drawings (Family: none)	1-4, 6, 7 5, 8-13
Y	JP 9-77767 A (Tokuyama Corp.), 25 March, 1997 (25.03.97), Full text; all drawings (Family: none)	1-5
X Y	JP 8-146391 A (Dainippon Ink And Chemicals, Inc.), 07 June, 1996 (07.06.96), Full text; all drawings (Family: none)	1, 2, 6, 7 3-5, 8-13
X Y	JP 11-30835 A (Fuji Xerox Co., Ltd.), 02 February, 1999 (02.02.99), Full text; all drawings (Family: none)	1, 2 3-13

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## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:

because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:

because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Claim 1 is an invention relating to an optical recording material which comprises a side chain type polymer liquid crystal containing a photochromic compound of electrocyclic reaction type.

Claim 2 is an invention relating to an optical recording material which comprises a side chain type polymer liquid crystal comprising a monomer unit having a photochromic compound of electrocyclic reaction type bonded thereto in the polymer chain thereof.

The use of a side chain type polymer liquid crystal containing a photochromic compound of electrocyclic reaction type as an optical  
(continued to extra sheet)

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

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## Continuation of Box No.II of continuation of first sheet(1)

recording material, which is regarded as a special technical matter in the meaning of PCT Rule 13.2 in the above respective inventions, is a known technical matter as can seen in the second sheet. The above two inventions are, therefore, not a group of inventions which are so linked as to form a single general inventive concept.

Accordingly, the above two inventions do not comply with the requirement of unity of invention.